

HP StorageWorks
Performance Advisor XP

Installation Guide

Version 2.0



notice

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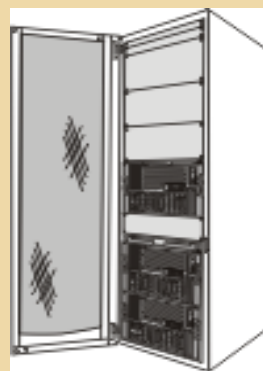
HP StorageWorks Performance Advisor XP Installation Overview

Please review the graphical overview presented below prior to following the installation procedures outlined in Chapter 1.

1. Carefully review the minimum product requirements for your browser, disk array, management station, and hosts, as specified in chapter 1 of this installation guide.



2. If you have not configured a command device on the array, you will need to do so. Map the device to the host server.



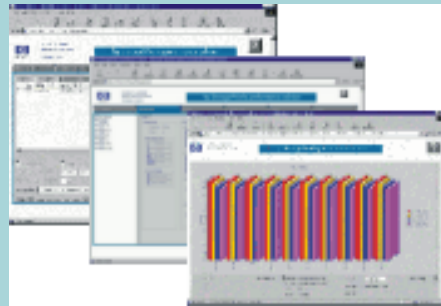
3. Install Performance Advisor XP on the management station.



4. Install Performance Advisor XP host agent on the host station(s).

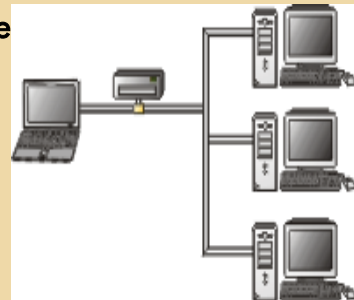


5. Use Performance Advisor XP.



Step 6, below, may be necessary to complete your PA XP configuration. Follow this step if you have host stations where you cannot install PA XP; this will allow you to enter host-to-array connectivity information.

6. To add connectivity information from the CLUI, see the UserHostConfig.pdf file at Tools/CmdLineUserInterface on the Performance Advisor XP CD. To add connectivity information via the GUI, use the Data Grid Update screen, located under PA XP's Configuration tab.



HP StorageWorks Performance Advisor XP Installation Guide

Getting Started

Before installing HP StorageWorks Performance Advisor XP (PA XP), make sure that you follow these instructions:

- Verify that your browser, disk array, management station, and hosts meet the minimum product requirements.
See ["Browser Minimum Requirements" on page 10.](#)
See ["Firmware Minimum Requirements" on page 11.](#)
See ["Management Station Minimum Requirements" on page 11.](#)
See ["Host Agent Minimum Requirements" on page 12.](#)

Note *If you plan to integrate other applications such as HP StorageWorks Command View XP, additional free disk space is required. Refer to the individual hard disk space specifications on the product CD for these additional requirements.*

Note *CV XP 2.0 is compatible only with PA XP 2.0.*

- If a version of PA XP lower than 1.7B is installed on the management station and you want to retain your current data, you must upgrade the management station to PA XP 1.7B, and then upgrade the management station to PA XP 2.0.
- If the PA XP host agent is currently installed on any hosts, uninstall it prior to installing the new version of the host agent. Refer to the installation guide for your previous version of PA XP for information on uninstalling the host software.
- If Command View XP is running, make sure that all users are logged off.
- Verify whether or not a Command Device has been created. See [“Creating a Command Device” on page 25](#) for further instructions.

Make sure that you install PA XP in the following order:

1. **Install PA XP on the management station.**
See [“Installing PA XP on the Management Station” on page 14](#).
2. **Install PA XP host agent on the host station.**
See [“Installing the Host Agent Software” on page 17](#).

Browser Minimum Requirements

For Windows XP, Windows 2000, and Windows Server 2003 (32-bit): Internet Explorer (IE) version 6.0 with Service Pack 1. Java plug-in 1.4.2 is required.

Note *If you want to run the web client on the management station, you must install the Java JRE plug-in separately on the management station. The supported JRE for Windows is available for download on the PA XP installation CD. If you prefer, to download the JRE for Windows from the Web, go to:*
<http://java.sun.com/products/archive/j2se/1.4.2/index.html>.

Note *The web browser must be configured to allow pop-ups in order for PA XP to function properly.*

Firmware Minimum Requirements

- XP256 arrays: Firmware version 52.49.40.00/00 or greater is required.
- XP512 and XP48 arrays: Firmware version 1.19.51.00/00 is required. (Firmware version 1.19.59.00/00 or greater is recommended.)
- XP128 and XP1024 arrays: Firmware version 21.10.09.00/00 is required. (Firmware version 21.10.09.00/00 or greater is recommended.)
- XP 12000: Firmware version 50.01.30.00/00 is required. (Firmware version 50.01.30.00/00 or greater is recommended.)

You will need to meet the following hardware and operating system requirements for the management station. See the requirements specific to whether you run PA XP as a standalone product or with HP StorageWorks Command View XP.

Management Station Minimum Requirements

Note *For optimal performance, HP recommends that you install PA XP alone on the management station.*

PA XP version 2.0 is compatible only with HP StorageWorks Command View XP 2.0. All versions of PA XP can run as standalone products.

- CD-ROM drive
- 800 MHz CPU (2 GHz is recommended)
- 1 GB RAM
- 2.5 GB free space on hard drive (NTFS)
- Ethernet LAN card connected to the network
- VGA graphics display with 256 colors (21-inch SVGA graphics display with 32-bit graphics interface is recommended)
- Windows 2000 (Service Pack 4) or Windows Server 2003 Enterprise Edition (32-bit)

Host Agent Minimum Requirements

Make sure you meet the following hardware and operating requirements for the host station(s), depending on your system.

Microsoft Windows 2000 and Windows Server 2003

- CD-ROM drive (required only for local installation of the host agent)
- 50 MB free space on hard drive (NTFS)
- Ethernet LAN card connected to the network
- A command device on the array (see [“Creating a Command Device” on page 25](#))
- RAID Manager Library version 01.09.03 (included with PA XP)
- Windows 2000 (Service Pack 4), or Windows Server 2003 Enterprise Edition (32-bit or 64-bit)

HP-UX, Sun Solaris, IBM AIX, or Linux

Note *Linux is not supported in connection to XP256 arrays.*

- CD-ROM drive (required only for local installation of the host agent)
- Sufficient disk space:
 - HP-UX (146 MB)
 - Sun Solaris (70 MB)
 - IBM AIX (72.5 MB)
 - Linux (192 MB)
- Ethernet LAN card connected to the network
- A command device on the array (see [“Creating a Command Device” on page 25](#))
- RAID Manager Library version 01.09.03 (included with PA XP)

- HP-UX 11.00 with JRE 1.4.01_03 with the following patches:
 - PHCO_23791, 23963, 24148
 - PHKL_18543, 23226, 234409, 24826, 24943, 25188
 - PHNE_21731, 23456, 23833
 - PHSS_23440, 17535, 23566
- HP-UX 11.11 with JRE 1.4.01_03 with the following PA-RISC patches:
 - PHCO_2477
 - PHKL_24253, 24254, 24256, 24551, 24751
 - PHNE_24035
- HP-UX 11.23 (32-bit and 64-bit) with JRE 1.4.2
- Sun Solaris 8 or 9 with JRE 1.4.2
- IBM AIX 5.1 or 5.2 with JRE 1.3.1
- Red Hat Enterprise Linux 3.0 (32-bit), Linux Kernel version 2.4.21, with JRE 1.4.2
- Red Hat Advanced Server Linux 2.1 (32-bit), Linux Kernel version 2.4.9, with JRE 1.4.2
- UnitedLinux 1.0/SLES8 (32-bit), Linux Kernel version 2.4.21 or 2.4.19, with JRE 1.4.2

Installing Performance Advisor XP

Make sure you carefully comply with all pre-installation requirements prior to installing PA XP.

Caution *If you are installing PA XP and Command View XP 2.0 on the same management station, you must install Command View XP first and then install PA XP.*

Installing PA XP on the Management Station

Note *Microsoft Windows 2000 and Windows Server 2003 (32-bit) are the only operating systems that the management station supports.*

1. Log in as a user with administrative permissions.
2. Insert the PA XP software CD in the CD drive.
3. The CD browser menu should start automatically. If not, run *launch.exe*.
4. From the CD browser menu, click **Install Performance Advisor XP**.

Note *Some of the links on the CD browser menu will not work until after installing PA XP.*

5. Click **Continue Install**. A window appears that displays important information for this release of PA XP.
6. Review this information, and click **OK**.
7. Click **Next**.
8. After viewing the **System Requirements** dialog box, click **Next**.
9. Select "I accept the terms of the license agreement" if you agree to its terms, then click **Next**.

10. If Command View XP is not installed, the installation wizard asks for the management station's DNS name or IP address. If you have multiple LAN cards configured in the management station, enter the IP address of your corporate LAN, and click **Next**.
11. In the **Setup Type** dialog box, click **Next** to accept the **Complete** selection (default).
12. In the **Choose Host Agent Platforms** dialog box, select the operating systems that the hosts will be running, and click **Next**.
13. Click **Install**.
The setup program transfers program files to the destination folder and configures PA XP.
14. When the setup is complete, click **Finish**.

Verifying Installation of PA XP on the Management Station

To Confirm Major Services

1. Select **Start > Settings > Control Panel**.
2. In the Control Panel, double-click **Administrative Tools**, and then double-click the **Services** icon. The Services dialog box appears.
3. If Performance Advisor XP has been installed, the status of HpssApache, HpssCVManagementServer, HpssPaSolid, HpssPaTomcat, and HpssSecurity should be in **Started** mode.
4. Close the **Services** dialog box.

To Configure the Web Browser's Web Proxy Server Setting

If your web browser is configured to use a web proxy server, you must configure it to not use a proxy server for the IP address or DNS names of the PA XP management station.

1. In Internet Explorer, click **Tools > Internet Options > Connections > LAN Settings > Advanced**.
2. Add the management station's IP address and fully-qualified DNS name to the Exceptions box.
3. Click **OK** to save changes.

To Verify Successful Installation

To verify that installation was successful, you should be able to start PA XP by using the following procedure:

1. Open your web browser.
2. In the browser address line, enter your server name followed by /pa, for example, `http(s)://[server name]/pa`.

This process opens the PA XP default applet. If the DNS server cannot locate the management station, enter `http(s)://[IP address]/pa`.

Note *The web browser must be configured to allow pop-ups in order for PA XP to function properly.*

Installing the Host Agent Software

Prerequisites

The following prerequisites are necessary for installing PA XP host agents:

- One of the supported operating systems. See [“Host Agent Minimum Requirements” on page 12](#).
- You must have administrator access to the remote host.
- The PA XP management station must have a DNS name.
- A Linux host must be a rexec server (see page 19).
- Only one remote deployment tool may run at a given time.
- Review the online Host Software Installation checklist. To view the checklist, start the host agent deployment utility and click **Host Software Installation Checklist**. Click the link for the remote host’s operating system.



Caution

Do not deploy PA XP host agents and Command View SDM host agents to the same host system. They cannot coexist.

There are two ways to install Path Connectivity host agents:

- Use the Host Agent Deployment tool.
- Download the host agent to the remote host from the **Support** tab in PA XP. Then, manually invoke the installation executable.

Note

If you plan to install the HP OpenView Storage Area Manager 3.2 host agent and PA XP host agent on the same host, you must install the Storage Area Manager host agent first and then install the PA XP host agent.

Please review the README file on the PA XP CD to find limitations regarding host agent installation.

Preliminary Host Agent Installation Tasks

If you choose to use local install instead of remote deployment, you do not need to share the drive or set up services such as rexec and rsh on the hosts.

To prepare for installing on Microsoft Windows platforms:

1. Be sure you have root, superuser, or administrator access to the system.
2. Share the system drive (for example, C\$).

To prepare for installing on UNIX platforms (HP-UX, Solaris, and AIX):

1. Be sure you have root or superuser access to the system.
2. Be sure the exec/rexec and FTP functions are enabled. On these platforms, the services should be enabled by default. For more details, consult the configuration instructions to enable exec/rexec from the corresponding operating system manual.
3. Configure the root/superuser account to allow remote access via the exec/rexec and FTP services.

To prepare for installing on UNIX platforms (Linux):

1. Be sure you have root or superuser access to the system.
2. Set up the rexec server on the Linux host. Verify that you have the rsh server package installed on the Linux host. For example, if you are using Red Hat Linux:
 - Enter `rpm -qa | grep rsh-ser*` at the command prompt.
 - If the command returns an entry, then go to <cross-reference>step 3.
 - If the command does not return an entry, install the package:
 - Insert the Red Hat CD in your CD-ROM.
 - Enter
`rpm -Uvh /mnt/cdrom/RedHat/RPMS/rsh-ser*.`
You may need to mount your CD-ROM if the OS cannot find the directory. The command `mount /dev/cdrom` should work.
3. Verify that the rexec service is started.
 - Enter `ntsysv` at command prompt.
 - Check the rexec and rsh services and click OK.
 - Restart the service by entering `service xinetd restart`.
 - Edit `/etc/pam.d/login`. Comment out (add “#” to the line):
`# auth required /lib/security/pam_securetty.so`
 - Edit `/etc/pam.d/rexec`. Comment out (add “#” to the line):
`# auth required /lib/security/pam_securetty.so`
 - Edit `/etc/pam.d/ftp`. Comment out (add “#” to the line):
`# auth required /lib/security/pam_listfile.so`
`item=user sense=deny file=/etc/ftpusers`
`onerr=succeed`
 - Restart the service by entering `service xinetd restart`.

4. Configure the root/superuser account to allow remote access via the exec/rexec and FTP services.
 - Run the `/usr/sbin/ntsysv` command and enable `wu-ftp`.
 - Edit `/etc/pam.d/ftp` by commenting out the following line with `#`:
 - `auth required /lib/security/pam_listfile.so item=user sense=deny file=/etc/ftpusers onerr=succeed`
 - Edit `/etc/ftpusers` by removing or commenting out the following line with `#`:
 - `root`
 - Edit `/etc/ftppass` as follows:
 - Change `allow-uid ftp` to `allow-uid ftp root`.
 - Change `allow-gid ftp` to `allow-gid ftp root`.
 - Run the `/sbin/service xinetd restart` command.

Installing Host Agents Using the Remote Deployment Tool

Note *If Command View XP 2.0 is installed on the same management station as PA XP, the remote deployment tool installs both the Command View Path Connectivity and PA XP host agents on the target hosts.*

To designate a single host:

1. Launch the remote deployment application by clicking **Start > Programs > HP StorageWorks > Host Agent Deployment Tools > Install Host Agent**.
2. Add a single host by entering the host name or IP address, administrator user name, and password.
3. Click **Add Host**.

To designate multiple hosts:

1. Launch the remote deployment application by clicking **Start > Programs > HP StorageWorks > Host Agent Deployment Tools > Install Host Agent**.

2. Click **Add Multiple Hosts**. A dialog box displays a table.
3. In the table, enter the host name or the host name or IP address, administrator user name, and password in their respective columns.
4. Click **Add All Hosts Now**.

To install the host agents:

1. The Managed Host list should now contain all the hosts previously added. From this list, click the hosts to which you want to deploy a host agent.
2. Re-authenticate the selected hosts by right-clicking and selecting **Re-authenticate** from the menu.
3. If Command View XP 2.0 or Storage Area Manager 3.2 host agents are already installed on a host, enable the PA XP management station to access the host by selecting **Start > Programs > HP StorageWorks > Host Agent Deployment Tools > Update Host Agent Access**, and then selecting **Set IP** for each host and updating access for each host.
4. Click **Install on Selected Hosts**.

If host agent installation fails:

Host Agent installation may fail due to CPU consumption or network instability. Repeat the above procedure with fewer hosts selected until you have successfully installed the Host Agent on all hosts.

If you continue to have difficulty deploying the Host Agent, use the local installation method as an alternative.

To update the host agent access files using the Remote Deployment tool:

By default, only the management station used to install the host agent has access to the host agent. If you want another management station to access the host, update the host access list by completing the following procedure.

1. Launch the remote deployment application by clicking **Start > Programs > HP StorageWorks > Host Agent Deployment Tools > Update Host Agent Access File**.

2. From the Managed Host list, click the hosts you want to update.
If the Managed Host list does not contain the host you want to update, manually add the host from the Add Single Host box, click **Add Host**, and then click the host from the Managed Host list.
3. Select **Set IP** for each host under the Add-Access Mode column.
4. Select the hosts for which you want to update access, and click **Add Access to Selected Hosts**.

Installing Host Agents Using the Local Method

To download the host agent file:

1. Access PA XP from your workstation.
2. Click the **Support** tab.
3. Navigate to the Software (Host) section. A list of supported host agents is provided.
4. Click the link for the desired host.
5. Download the *Host Agent tar* file (which contains all of the required software) to your computer.
6. FTP the *Host Agent tar* file to the `tmp` directory of the remote host.

To install the host agent locally:

1. Telnet to the remote host as root.
2. Navigate to the `tmp` directory.
3. Untar the host agent tar file by entering:
`tar -xvf hostagent_<os_name>.tar.`
4. Run the installation script:

For UNIX run:
`unix_local_install.sh.`

For Windows system running on IA-64 architecture, double-click **setup64.exe**. For other Windows host system architectures, double-click **setup.exe**.
5. For UNIX hosts, the installation script displays a series of prompts. Respond to these prompts as appropriate for your environment.

Verifying Installation of PA XP on the Host Station

To verify that installation was successful, you should be able to start PA XP by using the following procedure:

1. Open your web browser.
2. In the browser address line, type your server name followed by `pa`, for example, `http(s)://[server name]/pa`.
3. Select the **Host ID** field in the Data Grid screen. Confirm that your host station appears in the drop-down list box. It may take several minutes to appear if your host agent has hundreds or thousands of logical devices. You may need to click the browser's **Refresh** button to update the screen with the latest list of host agents.

This process opens the PA XP default applet. If the DNS server cannot locate the management station, enter `http(s)://[IP address]/pa`.

Enabling the Host Agent to Use SSL (HTTPS)

If you want to use secure sockets layer (SSL) protocol (HTTPS) on the host agent for file and data transfer, you must manually update the `paxp_service.properties` and `java.security` files on each host.

Note *This section applies to hosts only. Once SSL is enabled for hosts, you must enable SSL on the management station. Refer to the [Configuring Apache and Java for SSL white paper \(SSLWhitepaper.pdf\)](#) to enable SSL on the management station. This white paper is located at the root level of the installation CD.*

Microsoft Windows

1. Use the Services application in the Windows Control Panel to stop the **HP OpenView SAM HostAgent** service.
2. In a text editor, open the file `C:\Program Files\Hewlett-Packard\sanmgr\hostagent\config\paxp_service.properties`.
3. In the file, change `Protocol=http` to `Protocol=https`.
4. Verify that the management station's host name is a fully qualified DNS name and not an IP Address. For example:
`ManagementStation.Hostname=managementstation.mycompany.com`
5. Save and close the file.
6. In a text editor, open the file `C:\Program Files\Hewlett-Packard\sanmgr\jre\lib\java.security`.
7. Find the `keystore.type` tags in the file and modify the entries so that they appear as follows:
`keystore.type=jks`
`#keystore.type=jceks`
8. Save and close the file.
9. Use the Services application in the Windows Control Panel to start the **HP OpenView SAM HostAgent** service.

UNIX

1. Stop the Host Agent process by entering:
`/opt/sanmgr/hostagent/sbin/HA_trigger stop`
2. In a text editor, open the file `/opt/sanmgr/hostagent/config/paxp_service.properties`.
3. In the file, change `Protocol=http` to `Protocol=https`.
4. Verify that the management station's host name is a fully qualified DNS name and not an IP Address. For example:
`ManagementStation.Hostname=managementstation.mycompany.com`
5. Save and close the file.

Note *Steps 6 through 8 are not necessary for AIX hosts.*

6. In a text editor, open the file
`/opt/sanmgr/jre/lib/security/java.security`.
7. Find the `keystore.type` tags in the file and modify the entries so that they appear as follows:
`keystore.type=jks`
`#keystore.type=jceks`
8. Save and close the file.
9. Start the Host Agent process by entering:
`/opt/sanmgr/hostagent/sbin/HA_trigger start`

Creating a Command Device

If you are currently running Raid Manager (Business Copy and Continuous Access), you will have command devices already in place that can be used for PA XP. If Raid Manager is not currently in use, you will need to create a command device. To do so, you can use either the Command View XP or Remote Control applications.

Note *If you need further assistance, please contact your certified HP technical support representative.*

Command View XP

1. Log in as administrator.
2. Connect to the desired array.
3. Click the **LUN Manager** button.
4. Highlight the volume to be used as a command device.

Caution

The volume designated as the command device is used only by the disk array and is blocked from the user. The command device can be any device that is accessible by the host.

Make sure that no data exists on a volume that you select as a command device. Any data that might reside on the volume that you select becomes unavailable to the host. Also, make sure no file system has been mounted and no data is stored there.

5. Follow the instructions provided for your array:
For XP256, XP48, and XP512: Click **Set/Release Cmd Dev**.
For XP128, XP1024, and XP12000: Right-click the highlighted volume and select **Command Device: OFF->ON**. Select **Yes** in the resulting dialogue box. Your command device is now set and indicated by "C" on the volume icon in the LUN column.

Note

The volume designated as the command device is used only by the disk array and is blocked from the user. The command device can be any device that is accessible by the host.

The command device uses 16 MB of space. The remaining volume space is reserved for RAID Manager and its utilities. You cannot use logical unit size expansion (LUSE) volumes as a command device. However, you can use custom volume size (CVS) devices as small as 36 MB.

To Create a Command Device (Remote Control)

Note *This procedure is for XP256 arrays.*

1. Connect to the desired array.
2. Go to the LUN Management application.
3. In the menu, select the offline mode.
4. Highlight the volume to be used as a command device.

Caution *Make sure that no data exists on a volume that you select as a command device. Any data that might reside on the volume that you select becomes unavailable to the host. Also, make sure no file system has been mounted and no data is stored there.*

5. Click **Command Device**.
6. Click **OK**.

Stopping and Starting Services

The Performance Advisor XP services start automatically after installation and when the management station is restarted.

To Stop Services

Select **Start > Programs > HP StorageWorks > Stop services**.

To Start Services

Select **Start > Programs > HP StorageWorks > Start services**.

To Restart Services

Select **Start > Programs > HP StorageWorks > Restart services**.

Modifying or Repairing Performance Advisor XP

Use the Modify option to install or uninstall components. Use the Repair option to reinstall PA XP.

1. Insert the PA XP CD in the CD drive.
2. Run *PA_Server.exe* located on the CD.
3. Click **Next**.
4. To modify PA XP:
 - a. Click **Modify**, and click **Next**.
 - b. Select the components you want to install and clear the components you want removed.
 - c. Click **Next**.
 - d. Select the operating systems that your hosts are running in the Choose Host Agent Platforms window, and click **Next**.
 - e. The setup program transfers and/or removes application files to and from the destination folder, and configures PA XP. When complete, click **Finish**.
7. To repair PA XP:
 - a. Click **Repair** and click **Next**.
 - b. The setup program transfers application files to the destination folder and configures PA XP. When complete, click **Finish**.

Migrating to Another Management Station

If you are moving from an existing management station to a new management station, use the Backup Utility to migrate PA XP data, settings, and preferences. You can use this tool to preserve your data and configuration preferences when upgrading hardware by saving your existing settings and then restoring them on the new management station.

To use the Backup Utility, both management stations must have the same version of PA XP installed. This tool is not compatible with older versions of PA XP.

Migrating Your Data Using the Backup Utility:

1. Click **Start > Programs > HP StorageWorks > Backup Utility**. The Backup Utility window is displayed.
2. Complete the backup process:
 - a. Click **Backup**. The Open File dialog box is displayed.
 - b. Choose a location, such as a network drive or shared file system, to save the backup file and click **Open**. A confirmation dialog box is displayed.
 - c. Click **Yes** to proceed. The Backup Progress status window is displayed.
 - d. When the backup process is completed, the **Finished** button becomes available. Click **Finished**. A confirmation message is displayed.
 - e. Click **OK**.
3. If necessary, install PA XP 2.0 or later on the new management station.

4. Complete the restore process:
 - a. Click **Restore**. The Open File dialog box is displayed.
 - b. Navigate to where the backup file is located and click **Open**. A confirmation dialog box is displayed.
 - c. Click **Yes** to proceed. The Restore Progress status window is displayed.
 - d. When the restore process is completed, the **Finished** button becomes available. Click **Finished**. A confirmation message is displayed.
 - e. Click **OK**.

Saving or Restoring Your Data from the Windows Command Line:

- To save your files, enter `%HPSS_HOME%\bin\backuputility -backup <target-path>`. The *target-path* is the location, such as a network drive or shared file system, to where you want to save the backup file.
- To restore your files, enter `%HPSS_HOME%\bin\backuputility -restore <target-path>`. The *target-path* is the location where you want to restore the file.

Using Performance Advisor XP

How to Use Performance Advisor XP

1. To begin viewing data collected by the PA XP software, in the address line of a web browser, type `http(s)://[server name]/pa`.
2. Enter the password for PA XP. For the administrator, the user name is `administrator` and the password is `administrator`. For a general user, the user name is `user` and the password is `user`.

Note *Refer to the PA XP user guide or the online Help for information about changing the password. The default user name and password used for HP StorageWorks Performance Advisor XP software are known by HP service personnel. The information is not available on the Web.*

3. Click the Configuration tab to open the Data Collection Configuration screen. To begin collecting data, select a command device on the host that you want to use. Perform data collection on only one host per array. For more information, see the user guide or the online Help topic for with the Data Collection Configuration screen.

Note *Please follow a general rule of one minute per 1,000 LDEVs for the management station (computer) to keep up with collection. Remember that PA XP collects performance data on all LDEVs in the array. It is not limited to the number of LDEVs that the host station is mapped to use. Setting the collection rate too narrow hampers the management station by diminishing its responsiveness.*

Uninstalling Performance Advisor XP

To uninstall PA XP you must first uninstall the host agent from each host, then uninstall PA XP from the management station.

Uninstalling the PA XP Host Agent

There are two ways to uninstall the PA XP host agent:

- Use the Host Agent Deployment tool
- Use the local uninstall method

Uninstalling the Host Agents Using the Remote Deployment Tool

Note *The remote deployment tool uninstalls Command View XP Path Connectivity and Performance Advisor XP host agents if both are installed on the same host.*

Note *If the Storage Area Manager 3.2 host agent is also installed on the host, uninstall the PA XP host agent prior to uninstalling the Storage Area Manager host agent. Uninstalling the Storage Area Manager host agent first may result in uninstallation of some PA XP components.*

1. Launch the remote deployment application by clicking **Start > Programs > HP StorageWorks > Host Agent Deployment Tools > Uninstall Host Agent**.
2. Click the hosts you want to remove from the Managed Host list.
If the Managed Host list does not contain the host agent you want to remove, manually add the host from the Add Single Host box, click **Add Host**, and then click the host from the Managed Host list.
3. Re-authenticate the selected hosts by right-clicking and selecting **Re-authenticate** from the menu.
4. Click **Uninstall from Selected Hosts**.

If host agent uninstallation fails:

Host Agent uninstallation may fail due to CPU consumption or network instability. Repeat the above procedure with fewer hosts selected until you have successfully uninstalled the Host Agent from all hosts.

If you continue to have difficulty using the Remote Deployment tool to uninstall the Host Agent, use the local installation method as an alternative.

Uninstalling the Host Agents Using the Local Uninstall Method

Note *If the Command View XP Path Connectivity and Performance Advisor XP host agents are installed on the same host, this procedure will have the following behavior:*

For Unix hosts, the local uninstall script prompts you to choose which host agent to uninstall.

For Windows hosts, the local uninstall procedure removes both host agents on the host.

Note *If the Storage Area Manager 3.2 host agent is also installed on the host, uninstall the PA XP host agent prior to uninstalling the Storage Area Manager host agent. Uninstalling the Storage Area Manager host agent first may result in uninstallation of some PA XP components.*

To uninstall from Windows hosts:

1. At the host, select **Start > Settings > Control Panel**.
2. Double-click **Add/Remove Programs**.
3. Select **HP StorageWorks XP 2.0 Host Agent Installer**.
4. Click **Change**, and follow the online instructions to uninstall the Command View XP Path Connectivity host agent.

To uninstall from hosts other than Windows:

1. Telnet to the remote host as root.
2. Navigate to the `tmp` directory.
3. Untar the host agent tar file by entering:
`tar -xvf hostagent_<os_name>.tar.`
4. Run the uninstall script by entering:
`unix_local_uninstall.sh.`

Uninstalling the PA XP Management Station

Complete the following instructions only if you want to uninstall PA XP.

Note *If you are uninstalling PA XP and Command View XP from the same management station, you must uninstall PA XP first and then uninstall Command View XP.*

1. From the Control Panel in Windows, click **Add/Remove Programs**.
2. Click **HP StorageWorks Performance Advisor XP**.
3. Click **Change**.
4. Click **Next**.
5. Select **Remove**, and click **Next**.
6. Click **Remove**.
7. Click **Finish**. A message appears indicating that uninstallation was successful.
8. Reboot the management station to ensure the PA XP services are completely removed.

